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| APPLICATION NO.                   | FILING DATE              | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |  |
|-----------------------------------|--------------------------|----------------------|-----------------------|------------------|--|
| 10/707,184                        | 11/25/2003               | Peter T. Kazlas      | H-360 1183            |                  |  |
| 26245<br>DAVID I COL              | 7590 06/21/2007          |                      | EXAM                  | EXAMINER         |  |
| DAVID J COLE<br>E INK CORPORATION |                          |                      | NGUYEN, KHIEM D       |                  |  |
| 733 CONCORI                       | D AVE<br>, MA 02138-1002 |                      | ART UNIT PAPER NUMBER |                  |  |
| Cr HVID1GD GD                     | , WHY 02150 1002         |                      | 2823                  |                  |  |
|                                   |                          |                      |                       |                  |  |
|                                   |                          |                      | MAIL DATE             | DELIVERY MODE    |  |
|                                   |                          |                      | 06/21/2007            | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| · Office Action Summary   |   | Application No.   | on No. Applicant(s)  |               |  |  |  |
|---|---|---|--|---------------|--|--|--|
|   |   | 10/707,184  | KAZLAS ET AL.  | KAZLAS ET AL. |  |  |  |
|   |   | Examiner  | Art Unit   |               |  |  |  |
|   |   | Khiem D. Nguyen   | 2823   |               |  |  |  |
| Period fo   | The MAILING DATE of this communication apor Reply   | ppears on the cover sheet with  | the correspondence add   | dress         |  |  |  |
| WHI(<br>- Exte<br>after<br>- If NO<br>- Failt<br>Any  | IORTENED STATUTORY PERIOD FOR REPORTEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statuted patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION .136(a). In no event, however, may a reput will expire SIX (6) MONTHER, cause the application to become ABAI | ATION.  Iy be timely filed  IS from the mailing date of this condoned (35 U.S.C. § 133). |               |  |  |  |
| Status  |   |   | ·  |               |  |  |  |
| 1)  ズ   | Responsive to communication(s) filed on 17  | Anril 2007  |  |               |  |  |  |
| 2a)⊠  |   | is action is non-final.   |  |               |  |  |  |
| 3)  | <b>,</b> —  |   |  |               |  |  |  |
| ,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |  |               |  |  |  |
| Disposit  | ion of Claims   |   |  |               |  |  |  |
| 4) 🖂  |   |   |  |               |  |  |  |
| ,   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |  |               |  |  |  |
| 5)  |   |   |  |               |  |  |  |
| 6)  | Claim(s) <u>1-15 and 24-26</u> is/are rejected.   |   |  |               |  |  |  |
|   | Claim(s) is/are objected to.  |   |  |               |  |  |  |
|   | Claim(s) is/are objected to:  Claim(s) are subject to restriction and/or election requirement.  |   |  |               |  |  |  |
| Applicat  | ion Papers  | ·   |  |               |  |  |  |
|   | The specification is objected to by the Examir  | nor   |  | •             |  |  |  |
|   |   |   | shipetod to by the Even  | inor          |  |  |  |
| 10) The drawing(s) filed on <u>25 November 2003</u> is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). |   |   |  |               |  |  |  |
|   | Replacement drawing sheet(s) including the corre  |   |  | D 1 101/d)    |  |  |  |
| 11)   | The oath or declaration is objected to by the E   |   |  |               |  |  |  |
|   | under 35 U.S.C. § 119   |   |  | O-102.        |  |  |  |
|   |   | n priority under 25 11 C.C. S.A   | 140(a) (d) a = (6)   |               |  |  |  |
|   | Acknowledgment is made of a claim for foreig  ☐ All b)☐ Some * c)☐ None of:   | in phonity under 35 O.S.C. 9  | 119(a)-(d) or (f).   |               |  |  |  |
| u,  |   | nte have been received  |  |               |  |  |  |
|   | <ul><li>1. Certified copies of the priority documents have been received.</li><li>2. Certified copies of the priority documents have been received in Application No</li></ul>  |   |  |               |  |  |  |
|   | 3. Copies of the certified copies of the pri  | •   |  | Stone         |  |  |  |
|   | application from the International Bure   |   | sceived in this National 3   | Stage         |  |  |  |
| * (   | See the attached detailed Office action for a list  |   | aceived  |               |  |  |  |
|   |   |   | Jooiy Cu.  |               |  |  |  |
| •   |   |   |  |               |  |  |  |
| Attachmen   | • •   | 🗂   |  |               |  |  |  |
|   | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)   | 4) ∐ Interview Sui<br>Paper No(s)/  | mmary (PTO-413)<br>Mail Date   |               |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:   |   |   |  |               |  |  |  |
| Т -   |   | ٠, <u>١</u> ٥ ١١٥١  | •  |               |  |  |  |

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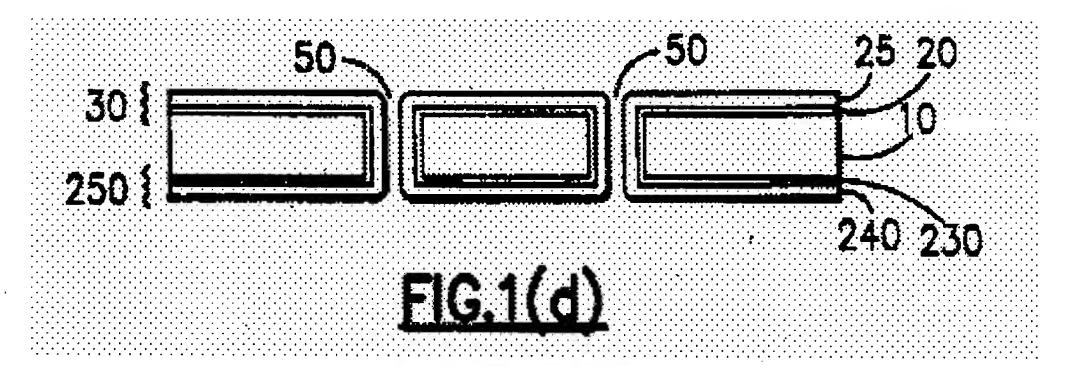
#### **DETAILED ACTION**

## New Grounds of Rejection

# Claim Rejections - 35 USC § 102

- 1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - A person shall be entitled to a patent unless -
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-2, 5-15 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Blackwell et al. (U.S. Patent 5,288,541).

In re claim 1, **Blackwell** discloses a backplane for use in an electro-optic display, the backplane comprising a patterned metal foil 240 (col. 10, lines 10-11) having a plurality of apertures 50 extending therethrough, coated on at least one side with an insulating polymeric material 10 (col. 6 lines 65-67) and having a plurality of thin film electronic devices 280 (col. 3, lines 46-58) provided on the insulating polymeric material (col. 6, line 62 to col. 7, line 65 and FIGS. 1(a)-(g)),



whereby the insulating polymeric material 10 separates the thin film electronic devices from the patterned metal foil 240 (col. 10, lines 2-49 and FIGS. 1(a)-(g)).

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In re claim 2, as applied to claim 1 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the apertures 50 are arranged on a rectangular grid (col. 7, lines 51-62 and FIGS. 1(a)-(g)).

In re claim 5, as applied to claim 1 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the patterned metal foil 240 is coated on both sides with an insulating polymeric material 10 (col. 10, lines 2-14 and FIG. 1(d)).

In re claim 6, as applied to claim 5 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the patterned metal foil 240 is coated on both sides with the same insulating polymeric material 10 (col. 10, lines 2-14 FIG. 1(d)).

In re claim 7, as applied to claim 5 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the patterned metal foil 240 is coated on its two sides with different insulating polymeric materials 10 (col. 10, lines 2-14 and FIG. 1(d)).

In re claim 8, as applied to claim 1 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein each of the thin film electronic devices 280 lies entirely within the area of one aperture 50 in the metal foil 240 (col. 10, lines 44-49 and FIG. 1(g)).

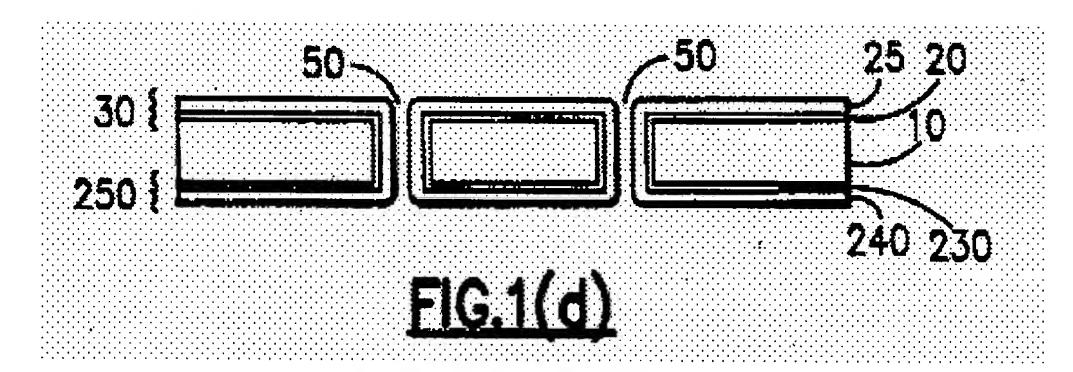
In re claim 9, as applied to claim 1 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein each of the thin film electronic devices 280 extends across a plurality of apertures 50 in the metal foil 240 (col. 10, lines 44-49 and FIG. 1(g)).

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In re claim 10, as applied to claim 1 above, <u>Blackwell</u> discloses all claimed limitations including an electro-optic display comprising a backplane according to claim 1 (FIGS. 1(a)-(g)).

In re claim 11, as applied to claim 10 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein an electro-optic display according to claim 10 comprising an encapsulated electrophoretic electro-optic medium (col. 10, lines 38-49 and FIG. 1(g)).

In re claim 12, **Blackwell** discloses a backplane for use in an electro-optic display, the backplane comprising a metal foil 240 (col. 10, lines 10-11) coated on at least one side with an insulating polymeric material 10 (col. 6, lines 65-67) and having a plurality of thin film electronic devices 280 (col. 3, lines 46-58) provided on the insulating polymeric material 10, the backplane further comprising at least one conductive via 50 extending through the polymeric material 10 and electrically connecting at least one of the thin film electronic devices 280 to the metal foil 240 (col. 6, line 62 to col. 7, line 65 and FIGS. 1(a)-(g)).



In re claim 13, as applied to claim 12 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the metal foil 240 serves as at least one of an

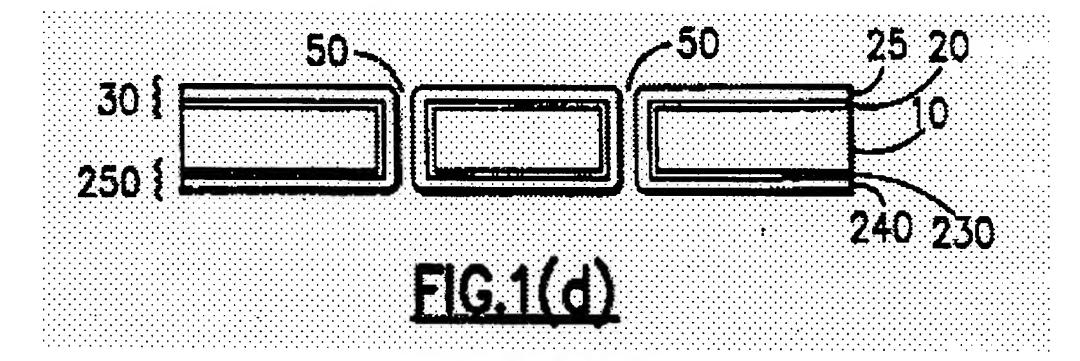
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antenna, an inductor loop, a power plane, a capacitor, a capacitor contact, a pixel electrode, and electromagnetic induction shielding (col. 10, lines 2-14).

In re claim 14, as applied to claim 12 above, <u>Blackwell</u> discloses all claimed limitations including an electro-optic display comprising a backplane according to claim 12 (FIGS. 1(a)-(g)).

In re claim 15, as applied to claim 14 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein an electro-optic display according to claim 14 in the form a smart card having an electro-optic display thereon, and wherein the metal foil 240 serves to communication between the card and a card reading apparatus (col. 3, lines 4-31 and FIGS. 1(a)-(g)).

In re claim 24, <u>Blackwell</u> discloses an electro-optic display having a metal substrate 40 (col. 8, lines 5-32), the display having a central portion comprising an electro-optic material and means for writing an image on the electro-optic material, and a peripheral portion extending around at least part of the periphery of the central portion, the peripheral portion having a plurality of apertures 50 extending through the metal substrate 40, by means of which apertures the electro-optic display may be stitched to a flexible medium (col. 6, line 62 to col. 7, line 65 and FIGS. 1(a)-(g)).



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In re claim 25, as applied to claim 24 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the peripheral portion of such a display is free from the electro-optic material (col. 6, line 62 to col. 7, line 65).

In re claim 26, as applied to claim 24 above, <u>Blackwell</u> discloses all claimed limitations including the limitation wherein the peripheral portion extends completely around the central portion so that the entire periphery of the electro-optic display can be stitched to the flexible medium (FIGS. 1(a)-(g)).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackwell et al. (U.S. Patent 5,288,541).

In re claims 3 and 4, as applied to claim 1 Paragraph 2 above, <u>Blackwell</u> discloses all the claimed limitations including a backplane comprising a patterned metal foil 240 having a plurality of apertures 50 extending therethrough, wherein the apertures occupying a certain predetermined percentage area of the patterned metal foil (col. 6, line 62 to col. 7, line 65 and FIGS. 1(a)-(g)) but does not explicitly teach or suggest wherein the apertures occupy at least about 30 percent or 60 percent of the area of the patterned metal foil.

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However, there is no evidence indicating the percentage range that the apertures occupy the area of the patterned metal foil is critical and it has been held that it is not inventive to discover the optimum or workable percentage range of a result-effective variable within given prior art conditions by routine experimentation. See MPEP § 2144.05. Note that the specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising there from. Where patentability is aid to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

## Response to Applicants' Amendment and Argument

5. Applicants' arguments with respect to claims 1-15 and 24-26 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP §
706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR
1.136(a). A shortened statutory period for reply to this final action is set to expire
THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khiem D. Nguyen whose telephone number is (571) 272-1865. The examiner can normally be reached on Monday-Friday (8:30 AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K.N.

June 18, 2007

Brook Kekeele PRIMARY EXAMINER